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Entrepreneurial activity in Turkey: A statistical overview for the years of 2006-2020

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ABSTRACT

Objective: The objective of the article is to understand the development of Turkish entrepreneurial activity over the last 15 years.

Research Design & Methods: The research design employed in this article is a quantitative one, mainly by utilizing the data available from Global Entrepreneurship Monitor and Eurostat to map the structure and the development of Turkish entrepreneurial activity between 2006 and 2020. With respect to gender, age and education status of Turkish self-employed, the article also employs a chi-square test of association.

Findings: The main empirical results of this article identify that whereas the overall share of self-employed among the active Turkish population dropped from 24% in 2006 to 17% in 2020, this is not only above the EU-27 average, but also largely due to a drop in the share of own account workers. The article highlights that over the duration of 15 years, the share of job creators among the active Turkish population remained stable despite all the negative events occurred in Turkey. The article also identifies a gender imbalance in terms of self-employment, and a significant difference between educational background of own account workers and job creators.

Implications & Recommendations: Understanding the patterns of development of Turkish entrepreneurial economic activity in the last 15 years can serve as a point of departure for both entrepreneurship researchers and policymakers. For entrepreneurship researchers, the case not only allows for a cross-national comparison, but also delivers empirical evidence from a transition country. For policymakers, fluctuations in the number of own account workers deserve more attention whereas stability of job creators can be further analysed for understanding what makes this group particularly stable despite all the negative events that occurred over the last decade.

Contribution & Value Added: The study contributes to the literature by offering a current overview of Turkish entrepreneurial activity in the last 15 years. Since the literature on Turkish entrepreneurship is primarily dominated by topics such as students' entrepreneurial intentions, women entrepreneurship or migrant entrepreneurship, the study offers empirical evidence to see the bigger picture of Turkish entrepreneurial economic activity.

Article type: research article

Keywords: Entrepreneurial activity; self-employment; Turkey

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INTRODUCTION

Entrepreneurship plays a key role in a country's economic development. Entrepreneurship, described as "the actions of a risk taker, a creative venturer into a new business or the one who revives an existing business" (Herbert & Link, 1989) (p. 39), is the connecting link between new idea generation and market shaping, or matching the needs of people with technology or artefacts (Erkut, 2016). Entrepreneurial activity can be described as a subjective journey towards the competition as a discovery process in the words of Friedrich August von Hayek (Hayek, 2002).

Literature on economics and business mainly identifies entrepreneurship within the domain of evolutionary economics (Erkut, 2016). Evolutionary economics, as put forward by Ulrich Witt, is like a patchwork (Witt, 2014)where different traditions or directions of research observed the emergence and the dissemination of knowledge from different angles (Buenstorf, 2007). In the evolutionary economic literature, Witt distinguishes between Neo-Schumpeterians, Schumpeter himself, universal Darwinists and representatives of naturalistic approaches (Witt, 2008) where entrepreneurship is mainly elaborated within the domain of Neo-Schumpeterians.

Accordingly, entrepreneurial economic activities or an entrepreneurial orientation (Benazzouz, 2019)shapes the economic evolution by means of introducing new goods and services and thereby shaping new markets, or market segments, or bringing fresh wind into existing ones (Erkut, 2020). Because of this central role dedicated to entrepreneurship, it is important to analyse the entrepreneurial economic activities of individuals in a systematic way, especially regarding their role in economic evolution and growth.

The novelty of this study is to explore the entrepreneurial economic activities in Turkey from 2006 until 2020 by using statistics available via Global Entrepreneurship Monitor and Eurostat. Previous studies mainly dominated Turkish entrepreneurship research by means of focusing on students' entrepreneurial intentions and entrepreneurial activities of specific groups in Turkey (to be more precise, women and migrants from Syria). In comparison to these studies, the novelty of the article is providing a general overview of data on current Turkish entrepreneurial activity, also by investigating current Turkish self-employed by means of their gender, age, and education.

The objective of the article is therefore to understand the development of the entrepreneurial economic activity in Turkey from 2006 until 2020 by focusing on the patterns of Turkish entrepreneurs' cohorts and characteristics from the Labour Force Survey data. By doing so, the article aims to answer the following research questions: What is the current state of entrepreneurial economic activity in Turkey? Who are the self-employed Turkish people?

The topic is important for a number of reasons: On the one hand, with a growing population of around 83.6 million people (Turkish Statistical Institute, 2021a), Turkey is one of the largest countries connecting Europe and Asia, and with a dynamic economy, it is considered to be one of the next eleven countries expected to be the biggest economies in the world. Nevertheless, it is a country in transition, one that is considered stable and sustaining its competitiveness largely due to information and communication technologies adoption, infrastructure measures and its dynamic labour market in addition to an improved human capital base (Schwab, 2019).On the other hand, the case of Turkey as a dynamic nation of transition gives a significant potential to understand the entrepreneurship-development nexus that goes beyond the cases of established Western economies. Also from a cross-national comparison perspective, one can identify entrepreneurial economic activities in Turkey as an important case of comparison due to the country's significant economic position and potential.

In what follows, the author will first discuss previous literature on entrepreneurship and self-employment, especially regarding the Turkish context. Next, the author will present the research methodology. The results will be presented and discussed, which is followed by a conclusion and perspectives for further research.

LITERATURE REVIEW

Recent literature on entrepreneurship explicitly analysed the role of environmental conditions on entrepreneurial economic activity. To be more specific, literature emphasized that differences in environmental conditions that shape entrepreneurial ecosystems can differ, and based on these differences, one can notice different paths of evolution towards an entrepreneurially driven economic structure (Guerrero *et al.*, 2020). Recent literature also highlights that entrepreneurship not only has a significant impact on economic development, but also the type of it has different consequences for different stages of competitive advantage. To be more specific, (Stoica *et al.*, 2020) identify that opportunity-driven entrepreneurship has a bigger impact on economic development of transition countries,

whereas necessity-driven entrepreneurship has a bigger impact on economic development of innovation-driven countries. Furthermore, recent empirical evidence suggests that the role of human capital in the transition towards a resilient, sustainable, entrepreneurially-driven economy gained importance in the last decade (Sharma, Shah, *et al.*, 2021; Sharma, Thomas, *et al.*, 2021; Sharma, Tiwari, Jain, *et al.*, 2021; Sharma, Tiwari, Talan, *et al.*, 2021).

These recent contributions imply that entrepreneurship is in fact very contextual, not only in terms of the discovery of subjective knowledge as a point of departure for market shaping activities (Erkut, 2016) or a resilience-oriented organisational transformation (Zutshi *et al.*, 2021), but also in terms of the conditions of entrepreneurial economic activity across different nations. In order to understand different national contexts in terms of their entrepreneurial conditions and current state, more empirical work is needed to motivate entrepreneurship policies that can stimulate entrepreneurial activity at the national level (Solomon *et al.*, 2021). When focusing on capturing the trends and current state of national economic activity, with a particular emphasis to entrepreneurship, it is essential to focus on the dynamics of the labour market for understanding different forms of self-employment, and distinguish between own-account workers and job creators to understand the latter's evolution, as job creators are the ones which contribute more to employment and economic development (Baluku *et al.*, 2021).

Since entrepreneurship-economic development nexus primarily relies on empirical evidence from developed nations (Stoica *et al.*, 2020), (Davidsson, 2015) suggests to gather empirical evidence from countries that have not been the subject of entrepreneurship research, which is followed by (Dvouletý, 2019) with the case of Czech Republic. Another such case is Turkey. Previous studies highlighted different aspects of Turkish entrepreneurship, although -to the knowledge of the authors- there is no systematic review of literature to understand tendencies and biases in current research on this topic. Some of the recent literature reviews can be identified, even though these are only partially covering the current state of entrepreneurship research in Turkey. A recent overview of postgraduate theses written in Turkey highlights that postgraduate theses of education faculties are biased towards understanding the entrepreneurial intentions of teachers and students in Turkey (Akyar & Sarıkaya, 2020). Similarly, (Gözüm, 2019) focused on scientific articles about entrepreneurship published in national scientific journals in Turkey. The author identified that the topic of entrepreneurial tendencies is the leading topic among Turkish researchers publishing in national scientific journals. A similar tendency can be seen in articles available via Web of Science in the last two years, as many scholars are engaging in measuring entrepreneurial tendencies(Gürel *et al.*, 2021; Özcan *et al.*, 2021; Yalçıntaş *et al.*, 2021), understanding the impact of Syrian refugee entrepreneurs on Turkish economy (Baktır & Watson, 2021; Chang, 2021; Kachkar, 2019) and how women entrepreneurs are changing the entrepreneurship scene in Turkey (Ármane *et al.*, 2021; Bozoğlu Batı & Armutlulu, 2020; Erdoğan, 2020; Kurteğe Sefer, 2020).

(Öner & Kunday, 2016) notice that entrepreneurship support started to increase and become more visible since 2006. According to the authors, the contextual framework of entrepreneurship, consisting of government policies, socioeconomic conditions, financial support, and skills (both entrepreneurial and business-related) seem to favour the growth of an entrepreneurial ecosystem in Turkey.
The approach by (Birelma, 2019) explores working-class entrepreneurialism in Turkey. The author identifies that among manual workers, wage work is considered as working for a stranger. The author interprets this as a sign of non-identification with wage work, especially when self-employment is a serious option and even a desire to be realized.

(Oğuztimur & Seçkin, 2018) evaluate the provinces of Turkey regarding their entrepreneurial potential regarding economic factors, human capital, physical infrastructure, and innovativeness. The authors identify an unbalanced regional potential regarding the development of entrepreneurial economic activity, where developed provinces show a higher entrepreneurial capacity than developing ones. The authors notice that the unbalanced regional development perspective is almost identically reflected in the unbalanced entrepreneurial potential of Turkey.

Even though these articles provide valuable insights into specific fields of entrepreneurship, an overview of current entrepreneurial activity and self-employment in Turkish economy is missing in the current literature. This is the research gap identified by the authors, as many scholars are focusing on who has the potential to become an entrepreneur (entrepreneurial tendencies), what specific and disadvantaged

groups of entrepreneurs are currently doing in Turkey (women and refugees), but little has been done to understand the current entrepreneurial economic activities in Turkey from national statistics.

RESEARCH METHODOLOGY

The approach follows the empirical strategy set by (Dvouletý, 2019) to use data from representative population surveys, to be more specific, the Global Entrepreneurship Monitor and the Labour Force Survey by operationalising the level of entrepreneurial activity by means of focusing on self-employment as a share of the economically active population between 15 and 64 years of the corresponding country. Hence, the research approach is a quantitative design focusing on the level of entrepreneurial activity available in statistics. This research will give an overview of recent statistical evidence covering the period of 2006-2020.

The statistical base of the quantitative design is taken from both Labour Force Statistics and the Global Entrepreneurship Monitor. Variables used for calculations are, first, the active total population, the number of self-employed persons, and the breakdown of the number of self-employed persons by means of gender, age, and education. These are taken from Eurostat(Eurostat, 2021a, 2021b, 2021c). In addition, the level of entrepreneurial activity is taken from the Global Entrepreneurship Monitor(Global Entrepreneurship Monitor, 2021a).

With the rate of self-employment, the authors indicate the share of self-employed persons among the active population between 15 and 64 years. With the rate of job creators, the authors indicate the share of self-employed with further employees among the active population between 15 and 64 years. With the rate of own account workers, the authors indicate the share of self-employed without any further employees among the active population between 15 and 64 years.

For calculating the association between the type of self-employment and gender, age, and education level respectively, the chi-square test of association will be utilized with the help of the statistical software package SPSS.

RESULTS AND DISCUSSION

According to the Turkish Statistical Institute(Turkish Statistical Institute, 2020), small and medium enterprises consisted of 99.8% of all enterprises in Turkey, accounting for 72.4% of employment, 50.4% of revenue and 44% of value added in 2019. In addition, the same source reveals that Turkish small and medium enterprises realized 36.6% of overall Turkish exports and contributed to research and development spending of Turkish firms by 31%. These recent statistics suggest that the Turkish economy is still very dependent on small and medium enterprises. This dependence on small and medium enterprises is historically rooted in the national economic dynamics by means of organizing small and medium entrepreneurs in entrepreneurial organizations called Ahi Institution(Aktürk, 2021). As (Aktürk, 2021) mentions, a nation's economic history is primarily its history of entrepreneurship, and historically, the Turkish economy developed with the efforts of small and medium enterprises, organized by means of Ahi Institutions.

Based on the detailed analysis of (Aktürk, 2021), one can notice the historical trend of an economy characterized by a dominating small and medium enterprise sector. With respect to the current situation of Turkish economy, one can only identify limited information about the long-term development of entrepreneurial economic activities in Turkey. For instance, separate entrepreneurship statistics have been introduced by the Turkish Statistical Institute only recently.

Starting with the Global Entrepreneurship Monitor results, the most recent data available from Turkey is for the year 2018(Global Entrepreneurship Monitor, 2021b). In 2018, the Total Entrepreneurial Activity (TEA) index for Turkey was 14.2% in 2018, a very sharp increase in comparison to 2006, in which the TEA index for Turkey was 6.1%. Similarly, the results revealed that 8.7% of the adult Turkish population was found out to be the owner-managers of new businesses in 2018 – which was a slight decrease in comparison to 2006, in which this rate was 11.4%. However, regarding the established business ownership results, one also notices a fluctuation over the years. In addition,

perceived opportunities for entrepreneurship increased from 33.9% in 2006 to 44.3% in 2018. Even though these numbers suggest an overall increasing trend, more recent data from the Global Entrepreneurship Monitor on Turkey is not available.

Hence, in what follows, the focus of the author would be on the Labour Force Survey, made available by Eurostat(Eurostat, 2021a, 2021b, 2021c), to understand the long-term development of entrepreneurial activity in Turkey. By focusing on the economically active Turkish population between 15 and 64 years of age, and self-employment engagement (both variables in 1000), the author calculated time series of self-employment rates (in %) in Turkey over the period of 2006-2020. By following the period starting from 2006, one can identify how entrepreneurial economic activity in Turkey evolved under the rule of the Justice and Development Party, which won its first election in 2002 and focused on restructuring the disastrous economy in the first four years of its governmental activity. Similar to the research strategy set by (Dvouletý, 2019), the author aims to distinguish between entrepreneurs with and without employees, i.e. job creators and own account workers. According to (Dvouletý, 2019) (p. 4) distinguishing between these two are important "especially from the perspective of policy makers, as job creators contribute mainly to economic growth".

Figure 1 depicts the results of the calculations of the previously explained rates; (1) the rate of self-employed, (2) the rate of job creators, and (3) the rate of own account workers.

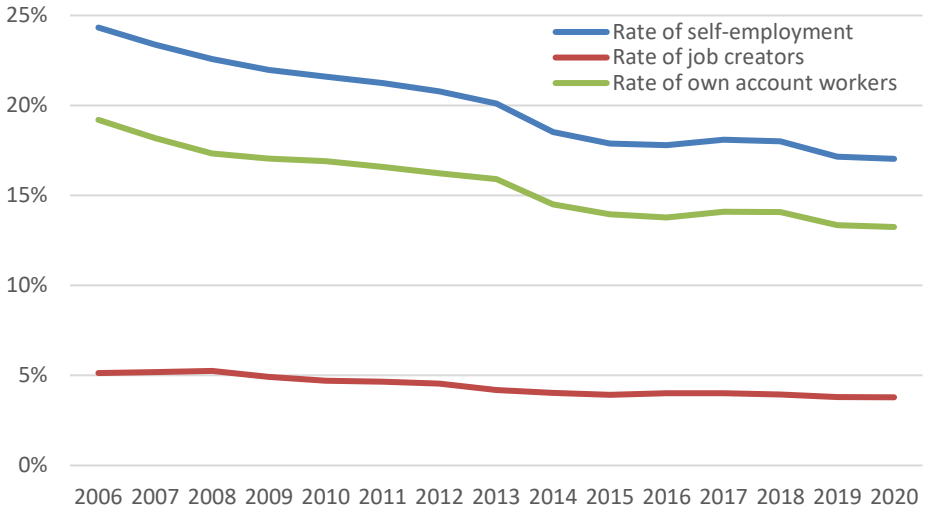

Figure 1. Entrepreneurial Activity in Turkey between 2006 and 2020 (entrepreneurial activity as a % of Turkish population aged 15-64)
Source: own elaboration based on Eurostat(Eurostat, 2021a, 2021b, 2021c) data.

From Figure 1, one can identify that the rate of self-employed was 24% in 2006, and it dropped to 17% in 2020. Nevertheless, this is a stable and gradual drop, as the rate is nearly constant around 17-18% since 2015. This rate is above the EU-27 average of 12,4% in 2020.

In addition, we can identify that the entrepreneurial economic activity is dominated by own account workers. These were 19% of the active Turkish population in 2006, and maintained their dominance until 2020, corresponding to 13% of the active Turkish population. Own account workers are also the ones whose numbers are fluctuating more than those of the job creators. However, their representation in the active Turkish population is above the EU-27 average of 8,7% in 2020.In comparison to own account workers, the rate of job creators did not change much over the years. Whereas it was around 5% from 2006 to 2013, it slightly dropped to 4% in 2014 and remained there since then. This indicates that there is a small but stable group of job creating entrepreneurs despite all the negative events occurred since 2006 – the global financial crisis in 2008/2009, the unsuccessful coup attempt by the Gülenist terror group (FETÖ) in 2016 and the global pandemics in 2019/2020 did not change the stable position of this group much. In comparison, the EU-27 average was 3,7%

in 2020, which indicates that Turkey's rate of job creating entrepreneurs is above the EU-27 average despite all the negative incidents that occurred in the last decade.

In what follows, a demographic exploration of the data regarding gender, age, and education will be presented using data available via Eurostat (Eurostat, 2021c, 2021a, 2021b). Even though restricting the economic activity of self-employed to properties such as gender, age, and education does not mean that these are the only relevant properties of entrepreneurs, these are nevertheless significant criteria when it comes to understanding the cohorts of Turkish entrepreneurs. The empirical strategy set by (Dvouletý, 2019) also focuses on understanding entrepreneurs by means of these three properties, but for the case of Turkey, the choice of these three properties can be justified by a number of reasons:

Regarding gender, it has already been emphasized in the literature review that the number of scientific publications on the topic of women entrepreneurship is keeping on growing (Ármane *et al.*, 2021; Bozoğlu Batı & Armutlulu, 2020; Erdoğan, 2020; Kurteğe Sefer, 2020), hence, it is worth analysing how gender and type of self-employment are associated. Regarding age group, a recent statistical analysis by the Turkish Statistical Institute (Turkish Statistical Institute, 2021b) highlights that Turkey has the youngest population in Europe, with the age group 15-24 accounting for 15,4%of the Turkish population. As already mentioned in the literature review, a growing number of scholars are focusing on the entrepreneurial tendencies of students with the aim of contributing to the agenda on increasing the number of young entrepreneurs tendencies (Gürel *et al.*, 2021; Özcan *et al.*, 2021; Yalçıntaş *et al.*, 2021), hence, utilizing the potential of the youngest population in Europe. Therefore, it would be of utmost importance to understand how Turkish youth is contributing to the entrepreneurial economic activities of the nation, implying a questioning of the association between age and type of self-employment. On the other hand, previous literature also emphasized the significant role of basic education on entrepreneurial economic activities in Turkey (Çetindamar *et al.*, 2012). Together with the observations of (Schwab, 2019) in the Global Competitiveness Report 2019, stating the importance of human capital development in understanding how Turkey is keeping its competitive position in the global economy, this result indicates that education and type of self-employment should also be analysed for detecting a possible association.

Tables 1, 2, and 3 show the results of the chi-square tests of association as well as Cramer's V for the average values of the period 2006-2020 for Turkey. In all three cases, data available from Eurostat (Eurostat, 2021a, 2021b, 2021c) has been utilized with the help of the statistical software package SPSS.

Table 1 shows us that there are roughly 5,6 times more self-employed males in comparison to females, which partially explains why there is a growing interest in academic scholars to concentrate on women entrepreneurship in Turkey. In case of job creators, 23,80% of males employ at least one further person, whereas only 11,77% of females employ at least one further person, indicating a further imbalance.

Table 2 shows us that those aged between 25 and 49 are the leading group among self-employed, with a share of 65,37%. They are followed by those aged between 50 and 64, with a share of 31,54%. In comparison to these groups, the youngest group of Turkish people aged between 15 and 24 constitute only 3,09% of total self-employed persons among the active Turkish population. Among the job creators, the lion's share is of those aged between 25 and 49 with 75,67%, whereas only 2,45% of those aged between 15 and 24 are employing at least one further person.

Table 3 shows us that a vast majority of self-employed persons in Turkey has primary education or less (73,78%). Half of the job creators belong to this group, whereas the other half is almost equally split between those who has upper secondary or post-secondary education and those who has tertiary education. In case of solo self-employed persons, this picture changes with those having primary education or less dominating the scene with 80,46%.

The results of this study indicate that there are imbalances in terms of gender, age, and education in case of self-employment. Self-employed Turkish people are mainly males, aged between 25-49, and have primary education or less. Own account workers largely dominate the scene, but their numbers are fluctuating more than the stable, but the small group of job creators.

Table 1. Chi-square association test for gender and type of self-employment (age range 15-64, in 1000, percentages given in parentheses)

Gender / Type of Self-Employment	Solo Self-Employed	Job Creators	Total Self Employed
Females	707.03(88,23%)	94.3(11,77%)	801.33 (100%)
Males	3459.2(76,20%)	1080.3 (23,80%)	4539.5 (100%)
Total Self-Employed	4166.23 (78%)	1174.6 (22%)	5340.83 (100%)

Test of Association, Chi-Square=57,720, p-value=0,000, Cramer's V=0,104
Source: own calculations in SPSS.

Table 2. Chi-square association test for age and type of employment (age range 15-64, in 1000, percentages given in parentheses)

Age category / Type of Self-Employment	Solo Self-Employed	Job Creators	Total Self Employed
15-24	136.31 (3,272%)	28.73 (2,45%)	165.04 (3,09%)
25-49	2602.28 (62,45%)	888.85 (75,67%)	3491.13 (65,37%)
50-64	1427.67 (34,278%)	257.02 (21,88%)	1684.69 (31,54%)
Total Self-Employed	4166.26 (100%)	1174.6 (100%)	5340.86 (100%)

Test of Association, Chi-Square=71,025, p-value=0,000, Cramer's V=0,115
Source: own calculations in SPSS.

Table 3. Chi-square association test for education and type of self-employment (age range 15-64, in 1000, percentages given in parentheses)

Level of Education / Type of Self-Employment	Solo Self-Employed	Job Creators	Total Self Employed
Less than Primary and primary (ISCED 2011 0-2)	3352.38 (80,46%)	587.94 (50,05%)	3940.32 (73,78%)
Upper Secondary and post-secondary	583.33 (14%)	308.43 (26,26%)	891.76 (16,70%)
non-tertiary (ISCED 2011 3-4)	230.55 (5,54%)	278.31 (23,69%)	508.86 (9,52%)
Tertiary (ISCED 2011 5-8)	4166.26 (100%)	1174.68 (100%)	5340.94 (100%)

Test of Association, Chi-Square=512,793, p-value=0,000, Cramer's V=0,310
Source: own calculations in SPSS.

CONCLUSIONS

By conducting this study, the authors aimed to address two research gaps present in the literature. From a national perspective, a big number of studies elaborating entrepreneurship in Turkey restricted themselves to entrepreneurial intentions of students, women entrepreneurship or entrepreneurial activities captured only by GEM data. This indicated that previous contributions were biased towards certain topics, but so far little has been done to capture real entrepreneurial economic activities in Turkey, especially in the sense of national statistics. Therefore, the article contributes to the ongoing debate around Turkish entrepreneurship by providing an up-to-date statistical overview of current entrepreneurial activities and self-employment, highlighting that this kind of overview is still missing for the Turkish case.

From the international perspective, the article contributes to the empirical agenda of capturing national levels of self-employment and entrepreneurship, allowing for a cross-national comparison. By combining different data sources, the study goes beyond the mere notion of capturing entrepreneurial intentions to allow for an overview of understanding what is currently happening in terms of entrepreneurial activity. The study, based on the empirical strategy set by (Dvouletý, 2019), calls for further contributions from different national perspectives to allow for a cross-national comparison of levels of entrepreneurial activity. In addition, the study follows the distinction made in (Dvouletý & Orel, 2020) regarding self-employed individuals with and without further employees to follow their development path separately.

The results indicated that even though the level of entrepreneurial activity dropped from 24% in 2006 to 17% in 2020, this was still above the EU-27 average and largely due to a decline in the number of own account workers. On the other hand, job creators – self-employed persons with at least one further employee – remained to be in a stable 4%-5% level throughout the period of observation. The stability of this group is more important for economic development than own account workers due to their impact

on creating additional employment. The results also revealed a gender imbalance, and different structures of age and education composition in case of own account workers and job creators.

The results imply that despite the negative events occurred in Turkey in the recent past, the group of job creators remained to be stable over the last 15 years, whereas fluctuations were mainly seen among own account workers. For policymaking purposes, the authors state that both phenomena need to be elaborated in detail, since the stability of job creators can be further enhanced to increase their number and therefore increase the employment rate, whereas any measures to lessen the fluctuations among own account workers can also work in favour of the economic situation. To increase the number of women entrepreneurs, a lot has been done in Turkey in the last 18 years. Nevertheless, a lot is still there to achieve. One possible strategy would be to have a close look at the job creator women to understand their aspirations, behaviour, and survival strategies, since improving institutional conditions only makes one part of the big picture, and regarding the role of women in the society, more measures should be taken to ensure a work-life balance and a balance between family and business for encouraging more women to make a career as an entrepreneur. Finally, the study also calls for policymaking to increase the number of self-employed among those between 15 and 24. Turkey, having the youngest population in Europe, has a big potential for youth entrepreneurship, and more efforts can be done to achieve a higher rate of self-employed within this age group.

Like any other scientific study, this article is not free of limitations. On the one hand, the study restricted itself to the data available from GEM and LSF and highlighted only national levels of entrepreneurship and self-employment. Future research can give more emphasis to regional imbalances in terms of entrepreneurial activity in Turkey. From previous research, it is known that developed provinces in Turkey have better conditions for entrepreneurial activity than developing ones. By focusing on these regional imbalances, further studies can elaborate what can be done for the catch-up process of developing provinces in terms of creating the conditions for entrepreneurial activity. On the other hand, in terms of the characteristics of self-employed, the study only focused on gender, age group and education level, whereas previous research highlights further characteristics that can as well be relevant for policy purposes. Therefore, further research can elaborate other characteristics of self-employed to shed light to current entrepreneurial economic activity.

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Conflict of Interest

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